



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Zhiping Yin et al.

Title: TRANSPARENT AMORPHOUS CARBON STRUCTURE IN SEMICONDUCTOR DEVICES

Docket No.: 303.864US1

Serial No.: 10/661,379

Filed: September 12, 2003

Due Date: N/A

Examiner: Christian D Wilson

Group Art Unit: 2829

**Mail Stop Amendment**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

- A return postcard.
- A Supplemental Information Disclosure Statement (2 pgs.), Form 1449 (1 pg.), and copies of 7 cited documents.
- Copy of International Search Report from Corresponding foreign Application No. PCT/US2004/029172 (15 pgs.).

**Please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.**

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

Customer Number 21186

By:   
Atty: Viet V. Tong  
Reg. No. 45,416

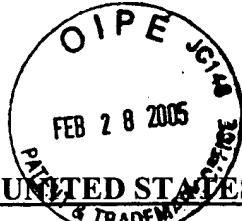
**CERTIFICATE UNDER 37 CFR 1.8:** The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 25 day of February, 2005.

Name 

Signature 

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
(GENERAL)

S/N 10/661,379



PATENT

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**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

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Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Supplemental Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Several of the attached documents were discovered as a result of a Search Report in Applicants' corresponding foreign patent application. Enclosed for the Examiner's information is a copy of the cited documents and the Search Report.

Pursuant to 37 C.F.R. § 1.97(b), it is believed that no fee or statement is required with the Supplemental Information Disclosure Statement. However, if an Office Action on the merits has been mailed, the Commissioner is hereby authorized to charge the required fees to Deposit Account No. 19-0743 in order to have this Supplemental Information Disclosure Statement considered.

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Serial No :10/661,379

Filing Date: September 12, 2003

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The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Pursuant to 37 C.F.R. 1.98(a)(2), Applicant believes that copies of cited U.S. Patents and Published Applications are no longer required to be provided to the Office. Notification of this change was provided in the United States Patent and Trademark Office OG Notices dated October 12, 2004. Thus, Applicant has not included copies of any US Patents or Published Applications cited with this submission. Should the Office require copies to be provided, Applicant respectfully requests that notice of such requirement be directed to Applicant's below-signed representative. Applicant acknowledges the requirement to submit copies of foreign patent documents and non-patent literature in accordance with 37 C.F.R. 1.98(a)(2).

Respectfully submitted,  
ZHIPING YIN ET AL.

By their Representatives,  
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.  
P.O. Box 2938  
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(612) 373-6969

Date Feb 25, 2005

By Viet V. Tong

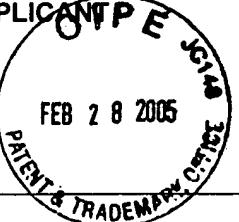
Viet V. Tong

Reg. No. 45,416

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NATIVE Doc.  
Name

[Signature]  
Signature

Substitute for form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <small>(Use as many sheets as necessary)</small>		<small>Complete if Known</small> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Application Number</td> <td>10/661,379</td> </tr> <tr> <td>Filing Date</td> <td>September 12, 2003</td> </tr> <tr> <td>First Named Inventor</td> <td>Yin, Zhiping</td> </tr> <tr> <td>Group Art Unit</td> <td>2829</td> </tr> <tr> <td>Examiner Name</td> <td>Wilson, Christian</td> </tr> </table>		Application Number	10/661,379	Filing Date	September 12, 2003	First Named Inventor	Yin, Zhiping	Group Art Unit	2829	Examiner Name	Wilson, Christian
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Examiner Name	Wilson, Christian												
		FEB 28 2005 											
		Sheet 1 of 1											
		Attorney Docket No: 303.864US1											

### US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
	US-2001/0006837A1	07/05/2001	Kwon, S., et al.	12/14/2000
	US-2002/0001778A1	01/03/2002	Latchford, I., et al.	08/02/2001
	US-2002/0086547A1	07/04/2002	Mui, D. S., et al.	07/13/2001
	US-2003/0207207A1	11/06/2003	Li, Weimin	05/03/2002
	US-4,975,144	12/04/1990	Yamazaki, S., et al.	03/17/1989
	US-5,998,100	12/07/1999	Azuma, T.	09/05/1997
	US-6,316,329	11/13/2001	Hirota, T., et al.	12/28/1999
	US-6,331,380	12/18/2001	Ye, Y., et al.	04/14/2000
	US-6,461,950	10/08/2002	Yin, Zhiping, et al.	05/30/2001
	US-6,566,757	05/20/2003	Banerjee, I.	03/01/2000
	US-6,653,735	11/25/2003	Yang, C. Y., et al.	07/30/2002

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	$T^2$
	EP-0531232A2	03/10/1993	Franke, H. G., et al.	
	EP-1154468A2	11/14/2001	Fairbairn, K., et al.	
	JP-58-204534A	11/29/1983	Obayashi, H., et al.	
	WO-03038875A2	05/08/2003	Czech, G., et al.	
	WO-2004/012246A2	02/05/2004	Bonser, D. J., et al.	

### OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	$T^2$
		"International Search Report, for Application No. PCT/US2004/029172, date mailed December 21, 2004", 15 pages	
		LIU, W., et al., "Generating Sub-30nm Poly-Silicon Gates Using PECVD Amorphous Carbon as Hardmask and Anti-Reflective Coating", <u>Proceedings of the SPIE, 5040, Optical Microlithography XVI</u> , Yen, A, (ed.),(02/25/2003),841-848	
		SHIEH, J. ., et al., "Characteristics of Fluorinated Amorphous Carbon Films and Implementation of 0.15 micron Cu/a-C:F Damascene Interconnection", <u>Journal of Vacuum Science and Technology</u> , 19, (May, 2001),780-787	

EXAMINER

DATE CONSIDERED

Substitute Disclosure Statement Form (PTO-1449)

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional) <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached